THE SECTION 103 REJECTION

Claims 1-3 and 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,983,073 Ditzik in view of US 2003/0018507 Al Flanagan. The Office Action noted that:

> As for Claim 1, Ditzik teaches on Column 3, Lines 50-58 a handheld computer to collect data; a camera (CCD) coupled to the computer to capture an image or video; Column 8, Lines 4¬6. Ditzik teaches on Column 5, Lines 18-22 a sketch pad (pen input means) coupled to the handheld computer to capture a sketch; Ditzik teaches on Column 9, Lines 55-67 code to annotate the image and communicate the image and data to a remote computer. Ditzik teaches that the hand held computer or PDA can contain a wide range of software and allow a user to perform data collaboration applications, and can be used as a personal organizer or personal information manager. Furthermore, Ditzik teaches on Column 10, Lines I-10 that a multiplicity of personal computing applications may be embodied on the computer. However, Ditzik does not specifically state that the personal handheld computer can be used to collect data related to a construction project.
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> Flanagan teaches on Paragraphs [0005-0006] a software system used for scheduling a plurality of simultaneous construction projects. Flanagan teaches the use of a system that includes several field communication devices (PDA's) that transmit construction project data to a server over a computer network. Flanagan teaches that this system is advantageous because it allows contractors to work more efficiently.
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> Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to install the construction management software of Flanagan in the PDA of Ditzik to enable the PDA to be use in a construction project management system so that contractors can better manage construction projects.

Ditzik relates to a small light weight modular microcomputer based computer and communications systems, designed for both portability and desktop uses. The systems make use of a relative large flat panel display device assembly, an expandable hinge device, battery power source, keyboard assembly, and wireless communications devices. The system is capable of bi-directional real-time communications of voice, audio, text, graphics and video data.

Contrary to the Office Action assertion, Ditzik's Column 9, Lines 55-67 fails to show code to annotate the image and communicate the image and data to a remote computer. Rather, Ditzik simply mentions that:

> The notebook unit can be used in an open configuration on a desktop, airline tray or wide variety of other computing environments. The unit can be configured for wire based or wireless communication operations. The unit can be used for general purpose computing, network computing, pen input computing, PCS/Cellular, data/video conferencing, on-line network computing and data collaboration applications. The notebook unit can be used as a personal organizer or personal information manager, such as a computer equivalent of the Franklin Planner.TM. or equivalent planners. A multiplicity of personal computing applications may be embodied on its computer. The unit may be capable of wire or wireless communications, linking it to multiple handsets and earsets. The notebook computer unit may have a plurality of electrical connectors along the edges or other convenient locations for connection to a plurality of external devices, including but not limited to: modems, network interface cards, hard disks, floppy disks, and bus extender enclosures.

Further, there is no linkage to the use of the notebook unit to collect construction project data. For this, the Office Action relied on Flanagan, which relates to a system for scheduling plurality of simultaneous construction projects with at least one server computer connected to a computer network, software capable of scheduling multiple events among a plurality of construction projects, said software controlling said at least one server computer, and a plurality of field communication devices each device of said plurality having a display and being capable of wirelessly connecting through the computer network for interactively communicating with said at least one server computer through a security controlled access including a unique identifier corresponding to each individual field communication device. Flanagan further discloses:

> [0005] The system relies on field supervisors supplying data related to the status of each building project. All data will be input by the builder or his designated administrator. The data are collected and entered into the system preferably by a wireless field communication device, and include recording the completion of

> scheduled tasks. The field communication device may be a computer, or more preferably may be any type of wireless communication device capable of connecting to a computer network, and particularly a global computer network such as the internet. Most preferably, however, information and data from the field, i.e. sites of construction projects, are entered into the system through a hand-held device such as a cellular telephone, a pager, or a personal digital assistant (also known as a PDA or palmtop computer). All these devices may be connected to the global computer network by on-line communications, or by wireless service, thus being able to easily communicate with the system directly from a construction job site.
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> [0006] Information entered through the field communication device and is then transmitted by the computer network to a server computer for storing and processing. The server computer's interactive software program calculates and updates all schedule data for each construction site. The updated schedule is available to the contractor, and to suppliers and subcontractors through internet dynamic web sites. In addition, the system's software provides management reports either periodically or on demand to the responsible builder, to his field supervisor(s), and to trades contractors, as desired. These reports will track all scheduling aspects of each construction site, including performance variances in material deliveries by suppliers, scheduled completion projections, and payment approvals for the builder's use in paying for supplies and services.

None of the references show the specifics of a camera coupled to the computer to capture an image or video; a sketch pad coupled to the handheld computer to capture a sketch; and code to annotate the image and to communicate the image and field construction data to a remote computer.

Applicant notes that the present rejection does not establish *prima facie* obviousness under 35 U.S.C. § 103 and M.P.E.P. §§ 2142-2143. The Examiner bears the initial burden to establish and support *prima facie* obviousness. *In re Rinehart*, 189 U.S.P.Q. 143 (CCPA 1976). To establish *prima facie* obviousness, three basic criteria must be met. M.P.E.P. § 2142. First, the Examiner must show some suggestion or motivation, either in the Ditzik reference or in the knowledge generally available to one of ordinary skill in the art, to modify the reference so as to produce the claimed invention.

M.P.E.P. § 2143.01; *In re Fine*, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Secondly, the Examiner must establish that there is a reasonable expectation of success for the modification. M.P.E.P. § 2142. Thirdly, the Examiner must establish that the prior art references teach or suggest all the claim limitations. M.P.E.P. §2143.03; *In re Royka*, 180 U.S.P.Q. 580 (CCPA 1974). The teachings, suggestions, and reasonable expectations of success must be found in the prior art, rather than in Applicant's disclosure. *In re Vaeck*, 20 U.S.P.Q.2d 1438 (CAFC 1991). Applicant respectfully submits that a *prima facie* case of obviousness has not been met because the Examiner's rejection fails on all requirements. First, there is no suggestion or motivation in any of the cited art to combine to produce the claimed invention of a field inspection system comprising: a handheld computer to collect field construction data; a camera coupled to the computer to capture an image or video; a sketch pad coupled to the handheld computer to capture a sketch; and code to annotate the image and to communicate the image and field construction data to a remote computer.

Secondly, Applicant notes that no motivation or suggestion, either in the cited art reference or in the knowledge generally available to one of ordinary skill in the art, has been cited by the Examiner to modify the Ditzik reference so as to produce the claimed invention. Further, Applicant fails to identify any motivation to modify the reference teaching so as provide a field inspection system comprising: a handheld computer to collect field construction data; a camera coupled to the computer to capture an image or video; a sketch pad coupled to the handheld computer to capture a sketch; and code to annotate the image and to communicate the image and field construction data to a remote computer as presently claimed.

Applicant points out that the Examiner bears the initial burden of factually establishing and supporting any *prima facie* conclusion of obviousness. *In re Rinehart*, 189 U.S.P.Q. 143 (CCPA 1976); M.P.E.P. § 2142. If the Examiner does not produce a *prima facie* case, the Applicant is under no obligation to submit evidence of nonobviousness. *Id.* In the instant case, the Examiner has not pointed to any evidence in Ditzik, or how knowledge of those skilled in the art, provide a suggestion or motivation to modify the reference teaching so as to produce the claimed invention for a field inspection system comprising: a handheld computer to collect field construction data; a camera coupled to the computer to capture an image or video; a sketch pad coupled to the handheld computer to capture a sketch; and code to annotate the image and to communicate the image and field construction data to a remote computer. See *In re Zurko*, 59 U.S.P.Q.2d 1693 (Fed. Cir. 2001) ([I]n a determination of patentability .... the Board cannot simply reach conclusions based on its understanding or experience - or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings).

Under *Vaeck*, absent any evidence of a cited suggestion or reasonable motivation in the Martinez et al. reference, or knowledge of those skilled in the art, for interpolating positional differences to produce successive digital data sets of tooth arrangements, *prima facie* obviousness of claims 1 and 11 (and those dependent therefrom) has not been established. As such, it is respectfully requested that the § 103(a) rejection of all claims be withdrawn and the claims be allowed.

As to the dependent claims, they are allowable as they depend from allowable claim 1. Withdrawal of the rejections of the dependent claims is requested.

In regard to claim 14, the Office Action noted:

As for Claim 14, Ditzik teaches on Column 3, Lines 50-58 a handheld computer to collect data; a camera (CCD) coupled to the computer to capture an image or video; Column 8, Lines 4-6. Ditzik teaches on Column 5, Lines 18-22 a sketch pad (pen input means) coupled to the handheld computer to capture a sketch; Ditzik teaches on Column 9, Lines 55-67 code to annotate the image and communicate the image and data to a remote computer. Ditzik teaches that the hand held computer or PDA can contain a wide range of software and allow a user to perform data collaboration applications, and can be used as a personal organizer or personal information manager. Furthermore, Ditzik teaches on Column 10, Lines 1-10 that a multiplicity of personal computing applications may be embodied on the computer. However, Ditzik does not specifically state that the personal handheld computer can be used to collect data related to a construction project.

Flanagan teaches on Paragraphs [0005-0006] a software system used for scheduling a plurality of simultaneous construction projects. Flanagan teaches the use of a system that includes several field communication devices (PDA's) that transmit construction project data to a server over a cou puter network. Flanagan teaches that this system is advantageous because it allows contractors to work more efficiently.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to install the construction management software of Flanagan in the PDA of Ditzik to enable the PDA to be use in a construction project management system so that contractors can better manage construction projects.

Ditzik in view of Flanagan teaches a field construction project management system in which a general contractor can issue PDA devices to employees that can enter construction project data while on site and have the construction project data sent via a communications link to a server that can manage all data related to a construction project.

Flanagan further teaches on Paragraphs [0004-0006, 0008, 0016-0018, 0020] that the data collected related the to construction project can include among other things management reports, supplying data, completion of scheduled tasks data, performance variance data, scheduling information, geographical positioning data, in progress lot status reports, variance reports, lists of completed tasks, materials deliveries, payment status reports. Flanagan does not teach that the construction management system can collect data related to material and labor costs and perform project estimation.

Duenke teaches on Paragraphs [0010-0015, 0042 and 0046-0047] that is it advantageous when managing a construction project to use software that enables a contractor to track material costs, labor costs, perform project estimation, and access vendor pricing data among other things. This is advantageous because it allows a contractor to minimize construction project costs.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to a allow the PDA's in the construction management system of Ditzik in view of Flanagan to include the project management features as taught in Duenke to better manage a construction project.

Furthermore, Official notice is taken that it was well known in the art at the time the invention was made that when managing a construction project a multitude of different data is needed in order to manage a construction project. Official notice is taken that it was well know in the art at the time the invention was made to collect data for a construction project relating to work in progress data, project and contract identification data, inspector identification data, item number data, location data, labor related information, labor type, quality and hours, equipment information, equipment type, quantity, hours in use and stand-by hours, submittal information, weather condition, comments, and an inspector name.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the PDA's in the construction management system of Ditzik in view of Flanagan to capture construction project data related to any pertinent data that is needed in the management of a construction project in order to allow a general contractor to better manage a construction project.

First, Ditzik and Flanagan do not disclose the claimed operations as discussed above. Duenke relates to a material and labor cost estimating method and system for estimating the construction costs related to mechanical contracting, electrical contracting, fire protection or processing businesses. The combination fails to disclose a process including capturing an image of the construction project using a camera coupled to the handheld computer; tracking budgetary information using a planning system; performing site engineering assessment using a design system; and tracking material consumption and progress for each project using a construction system, the construction system adapted to receive data collected from the handheld computer.

Applicants respectfully traverse the rejection as there was no suggestion or motivation, either in the Ditzik reference or in the knowledge generally available to one of ordinary skill in the art, to modify the reference so as to produce the claimed invention.

M.P.E.P. § 2143.01; In re Fine, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Here, there is no suggestion or motivation to modify Ditzik to arrive at managing a construction project by collecting construction data from the field with a handheld computer; capturing an image of the construction project using a camera coupled to the handheld computer; tracking budgetary information using a planning system; performing site engineering assessment using a design system; and tracking material consumption and progress for each project using a construction system, the construction system adapted to receive data collected from the handheld computer.

Secondly, the Examiner must establish that there is a reasonable expectation of success for the modification. M.P.E.P. § 2142. This was not done and the rejection should be withdrawn.

Thirdly, the Examiner must establish that the prior art references teach or suggest all the claim limitations. M.P.E.P. §2143.03; In re Royka, 180 U.S.P.Q. 580 (CCPA 1974). The teachings, suggestions, and reasonable expectations of success must be found in the prior art, rather than in Applicant's disclosure.

As discussed above, the references do not managing a construction project by collecting construction data from the field with a handheld computer; capturing an image of the construction project using a camera coupled to the handheld computer; tracking budgetary information using a planning system; performing site engineering assessment using a design system; and tracking material consumption and progress for each project using a construction system, the construction system adapted to receive data collected from the handheld computer.

In sum, claim 14 and those dependent therefrom are patentable over the cited references. Withdrawal of the rejection of all claims is requested.

CONCLUSION

Appellant believes that the above discussion is fully responsive to all grounds of rejection set for the in the Office Action.

Authorization to charge a small entity extension fee to Deposit Account 501861 is granted.

If for any reasons the Examiner believes a telephone conference would in any way expedite resolution of the issues raised in this appeal, the Examiner is invited to telephone the undersigned at 408-528-7490.

Respectfully submitted,

By: _____

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